



Town of Frederick
Board of Trustee Work Session
Town Hall – 401 Locust Street
Frederick, CO 80530
Tuesday, February 19, 2013
5:00 PM – 7:00 PM

1. Electric Vehicle Charging Stations
2. Planning Commission
3. Chickens in Residential Zones
4. Oil and Gas



TOWN OF FREDERICK

Board of Trustees

Information Memorandum

Tony Carey, Mayor

Jim Wollack, Mayor Pro Tem
Rafer Burnham, Trustee
Amy Schiers, Trustee

Laura Brown, Trustee
Gavin Payne, Trustee
Fred Skates, Trustee

Electric Vehicle and Charging Station

Agenda Date: Board of Trustees Work Session February 19, 2013

Attachments:
a. 2012 Colorado PEV Readiness Plan

Issue/Request:
CEO grant funds available for electric vehicles and charging stations.

Submitted by: _____
Chris Kennedy

Approved for Presentation: _____
Town Manager

Summary:
Recently Mr. Ken Jones, electric car owner, member of the Denver Electric Vehicle Council¹ and Town of Firestone resident, approached Town of Frederick staff about the possibility of installing one or more charging stations in town to accommodate plug-in electric vehicle (PEV) owners in the area, both now and in the future as the number of PEV owners grows. Mr. Jones also provided staff with information regarding Regional Air Quality Council and Colorado Energy Office grants that fund both the purchase of PEVs and PEV charging stations (EVSE – Electric Vehicle Supply Equipment). Staff is providing the Board of Trustees with information regarding PEVs, EVSE and available grant funds, and requesting that the Board provide direction on whether to submit a grant for a charging station.

Detail of Issue/Request:
Much of the information in this section was taken directly from the Colorado Electric Vehicle and Infrastructure Readiness Plan attached for additional information and also available online: <http://www.electricridecolorado.com/> and/or the Electric Vehicle and Charging Station Grant Application attached and also available online: http://cleanairfleets.org/documents/detail/electric_vehicle_and_charging_station_grant_application/
PEV Market Growth

¹ The Denver Electric Vehicle Council was founded by a University of Colorado electrical engineering professor after the 1973 gasoline crisis to educate people on the potential of electric vehicles as a means of meeting transportation needs with locally-produced energy. The DEVC has more than 100 members and serves as the Colorado Chapter of the national Electric Auto Association (EAA). <http://www.devc.info>

As of July 2012, there were nearly 1,300 registered PEVs in the state of Colorado (about triple over 2011). There are currently 11 PEV models available (or soon to be available) in the state, the most in the history of the market. In addition to these new vehicles, there are more than 200 consumer-driven conversion vehicles. Colorado also has one of the highest state tax credits available at up to \$6,000, which when combined with the \$7,500 Federal tax credit, can result in up to \$13,500 off the purchase price of a PEV.

The average starting price for 9 of the 11 currently available PEV models is approximately \$37,989. (Tesla Roadster and Fisker Karma are luxury vehicles with starting prices of over \$100,000, so they were excluded.) After tax credits, the average starting price for one of these PEVs would be approximately \$24,489, although the Mitsubishi iMiev can be had for \$16,855, the Wheego Whip Life for \$19,495, and the Nissan Leaf for \$21,700. Others available under \$30,000 (after tax credits) include the Chevy Volt (\$25,645), Ford Focus (\$26,495) and the Toyota Prius (\$28,450).

Market forecasts suggest that PEVs will represent up to 6.3% (41,818 vehicles) of total vehicle sales in Colorado by 2015, and up to 22.1% (471,477 vehicles) by 2025. If Frederick averages 5% growth through 2025, these statewide forecasts could mean more than 1,300 PEVs on town roads. If Frederick averages 10% growth during that time, it could mean almost 2,700 PEVs in town.

The relative lack of charging stations has been identified as a barrier to the growth of the PEV industry. Currently, there are approximately 70 public charging stations in Colorado, the vast majority (54) of which are in the Denver metro area. The charging stations closest to Frederick are in Longmont, Erie and Lafayette. In terms of cost, charging stations (EVSE) range anywhere on a scale from smaller units that are less than \$1,000 to commercial units with card access and payment features for \$15,000 or more. See “Charging Stations” attachment for pictures and pricing, and “Electric Vehicles in the News” attachment for more general information.

Contributing Organizations

A growing number of utilities, businesses, government organizations and transit agencies are taking the lead in shaping a business climate that encourages expansion of the PEV market. In addition to a number of private sector firms, such as General Motors and IKEA Centennial, the government, utility and non-profit organizations listed below have incorporated PEVs into their fleets and/or have installed PEV charging stations (or are in the process of doing so). A much longer list of organizations participated in the development of the Colorado PEV Readiness Plan.

- City of Aurora
- City of Boulder
- City of Colorado Springs
- City and County of Denver
- High Plains Library District
- State of Colorado Fleet Management
- Mesa Verde National Park
- Colorado State University
- Energy Efficiency Business Coalition
- Denver Museum of Nature & Science
- Southwest Energy Efficiency Project
- Regional Air Quality Council
- University of Colorado at Boulder
- Renewable Energy Initiative
- Colorado Springs Utilities
- Black Hills/Colorado Electric Utility Company
- Xcel Energy

Grant Funds Available

To further their efforts in promoting increased air quality in the State of Colorado, the Regional Air Quality Council (RAQC) and Colorado Energy Office (CEO) have teamed up to provide a funding opportunity to encourage the deployment of electric vehicles by providing financial support for both electric vehicles (EV) and electric vehicle charging stations (EVSE). Goals of these grants include:

1. Incentivize the diversification from petroleum operated vehicles in area public fleets by funding vehicle and infrastructure costs;
2. Promote the transformation of the region's transportation system by incentivizing the development of geographically dispersed EVSE charging infrastructure;
3. Reduce harmful air pollutants;
4. Reduce greenhouse gas emissions;
5. Promote energy security by reducing petroleum usage and implementing cleaner, reliable alternative transportation;
6. Encourage technological innovation;
7. Advance fleet sustainability; and
8. Promote greening government initiatives.

At this time, the Regional Air Quality Council (RAQC) has funding for both EVs and EVSE and the Colorado Energy Office (CEO) has funding for EVSE. (See attached photos of EVSE) The RAQC has funding to pay 80% of the incremental cost differential between a gasoline/diesel vehicle and the comparable EV up to \$8,260. In addition, both RAQC and CEO have funding to pay 80% of the cost of EVSE up to \$6,260.

Currently, Frederick would only be eligible to receive funds from the Colorado Energy Office, as funding from the Regional Air Quality is earmarked for applicants from the seven county Denver Metro Area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas or Jefferson). The relevant 2013 application deadlines would be February 28 and April 1.

Potential Benefits to the Town

The Town of Frederick could benefit in a number of ways from installing PEV charging stations and/or purchasing PEVs including:

1. Participation would assist in the broader effort towards national energy independence by burning less gasoline in conventional Town vehicles and/or adding to the growing network of charging stations for PEVs. Plus, promoting energy independence and clean air would be good for the town's image, and likely attract residents and businesses.
2. Installing even one PEV charging station would create a draw for the growing number of electric car enthusiasts, such as the 100+ members of the DEVC and similar organizations. Such travelers of the I-25 corridor might initially stop in Frederick for the sole purpose of recharging their vehicles, but might end up having a meal, or making other purchases while they are in town.
3. Associating the town with a high-profile effort that includes other municipalities, influential non-profits and cutting edge businesses can only be good marketing for the town's industrial sector, and could attract new companies to the area, thereby improving its economic base.
4. Integrating PEVs into the Town fleet would reduce annual fuel and maintenance costs, and improve resale value. According to the Colorado PEV Readiness Plan, depending upon what kind of PEV they own, owners can save an average of \$15,627 per vehicle over a 10 year period. Owners can also realize a resale value on PEV batteries of up to \$3,010 each, for a total savings of \$18,362 per vehicle over 10 years.
5. As the inventory of PEVs on Colorado roads grows over time, access to charging stations will undoubtedly become one of the criteria by which owners of such vehicles choose the communities they live in.
6. Creating a reason for people to stop in town when they wouldn't normally do so would undoubtedly give businesses, such as restaurants, another reason to locate in the area.
7. Frederick is a golf community, so if the PEV charging station is located near Bella Rosa, the station could also be used to charge golf carts.
8. If the Town is awarded a grant, getting involved would cost very little relative to all of the potential benefits.

Alternatives/Options:

Staff is requesting that the Board consider the information provided and direct staff in one of the following ways:

1. Create an internal working group to further research the feasibility of applying for a grant to fund: 1) the purchase and installation of one or more charging stations for plug-in electric vehicles; and/or 2) the purchase of one or more plug-in electric vehicles for integration into the Town fleet. The group would work with the goal of coming back to the Board with more information and a formal request in time to submit a grant application by the April 1, 2013 deadline.
2. Create an internal working group to further research the feasibility of applying for a grant to fund: 1) the purchase and installation of one or more charging stations for plug-in electric vehicles; and/or 2) the purchase of one or more plug-in electric vehicles for integration into the Town fleet. The group would work with the goal of submitting a grant application in 2014.
3. NOT research the matter further or prepare an application for grant funding in 2013 or 2014 for either a charging station or plug-in electric vehicle.

Electric Vehicles in the News

The following news articles regarding electric vehicles and charging stations have been provided for the information of the Board:

<http://www.csmonitor.com/Business/In-Gear/2013/0205/Will-Nissan-Leaf-sales-soar-in-2013>
http://www.nytimes.com/2013/02/10/world/europe/dutch-put-electric-cars-to-the-test.html?_r=0
<http://www.torquenews.com/1075/electric-car-owners-refusing-be-depressed-over-dismal-electric-car-sales>
<http://ca.autos.yahoo.com/blogs/motoramic/69-month-lease-mitsubishi-miev-becomes-america-cheapest-211851404.html>
<http://www.thestreet.com/story/11831063/3/electric-car-sales-to-double-in-2013.html>
<http://www.reuters.com/article/2013/02/01/us-usa-autosales-evs-idUSBRE91019N20130201>
<http://editorial.autos.msn.com/blogs/autosblogpost.aspx?post=56319b5f-dd52-497f-bf66-f11eb142652f>
<http://www.pluginCars.com/dip-electric-vehicle-sales-low-inventories-126390.html>
<http://www.detroitnews.com/article/20130131/AUTO0102/301310352>
http://www.huffingtonpost.com/bill-chameides/electric-vehicles-rev-int_b_2574511.html
<http://www.digitaltrends.com/cars/how-an-electric-car-gets-99-miles-per-gallon-mpge-ratings-explained/>
<http://www.autospies.com/news/Testing-Electric-Vehicles-in-the-Real-World-74688/>
<http://www.examiner.com/article/atlanta-gets-its-first-chargepoint-electric-car-charging-stations>
<http://belmontshore.patch.com/articles/charge-your-electric-car-near-belmont-shore>
<http://www.mantecabulletin.com/section/1/article/66332/>
<http://gigaom.com/2013/02/12/a-german-startups-plan-to-make-electric-car-charging-more-like-cell-phone-service/>
http://www.greencarreports.com/news/1082243_solar-tent-keeps-electric-cars-charged-when-parked
<http://www.tflcar.com/2013/02/remove-electric-car-range-anxiety-with-the-range-extending-ebuggy/>

Charging Stations – Pictures and Pricing

The following models have been presented as examples of what charging stations can generally look like and cost. There are many other models available that are not included here.

PEP Stations
\$15,162



General Electric
\$11,276



Leviton
\$7,828



Schneider Electric
\$4,830



Siemens
\$1,788



Source:

<http://www.grainger.com/Grainger/electric-vehicle-charging-stations/automotive-maintenance-tools/fleet-and-vehicle-maintenance/ecatalog/N-hcd?op=search&sst=subset>



TOWN OF FREDERICK

Board of Trustees

Information Memorandum

Tony Carey, Mayor

Jim Wollack, Mayor Pro Tem
Rafer Burnham, Trustee
Amy Schiers, Trustee

Laura Brown, Trustee
Gavin Payne, Trustee
Fred Skates, Trustee

Consideration of Chickens in Residential Zones

Agenda Date: February 19, 2013

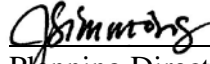
Attachments:

- a. Comparison of Municipal Regulations
- b. Sample Code Language from City of Lafayette, Colorado

Issue/Request:

The Board of Trustees requested information related to allowing chickens in residential zones. The following information attempts to address that request.

Submitted by:


Planning Director

Approved for Presentation:


Town Manager

Detail of Issue/Request:

The Board of Trustees requested information related to allowing chickens in residential zones.

This topic was thoroughly examined by the City of Longmont Planning Staff in 2008. The Longmont Planning staff surveyed Arvada, Aurora, Boulder (city), Boulder County, Brighton, Broomfield, Fort Collins, Frederick, Lafayette, Lakewood, Louisville, Loveland, Thornton, Westminster, and Wheat Ridge. Of the fifteen jurisdictions, six allowed chickens in residential zones in one form or another. Additionally, one jurisdiction was in the process of amending their code.

These jurisdictions were surveyed again to determine if any changes had occurred. As of today, nine jurisdictions now allow chickens in residential zones. When adding the communities of Dacono, Erie, Firestone, and Fort Lupton to the group (see attachment), nine communities allow chickens and nine do not allow chickens. One footnote to this, Fort Lupton is currently considering an amendment to the Municipal Code to allow chickens.

As with all things, there are pros and cons associated with allowing chickens in residential zoning districts. The Longmont staff identified the following:

PROS ASSOCIATED WITH ALLOWING HENS IN RESIDENTIAL ZONING DISTRICTS:

- Hens provide a fresh, locally produced, and inexpensive source of food to families at a time when food prices are increasing in relation to increases in fuel, shipping, and packaging costs.
- Hens eat food scraps, dandelions, mice, and insects and may contribute to reductions in the waste stream.
- The hen droppings may be used as a natural fertilizer which may be used in backyard gardens.
- Eggs from backyard chickens are more nutritious than factory-produced eggs.

CONS ASSOCIATED WITH ALLOWING HENS IN RESIDENTIAL ZONING DISTRICTS:

- The presence of chickens may attract predators and critters such as foxes and raccoons into residential neighborhoods putting pet animals like dogs and cats at greater risk of attack.
- May lead to unsanitary conditions due to owner neglect.
- Hens may take flight in short bursts and are capable of clearing a six foot privacy fence.
- There may be an increase in complaints associated with roosters. When individuals buy chicks, they will not be able to distinguish between a hen and rooster. Owners may form an attachment with the roosters that were raised from chicks and express a reluctance to give them up.

Urban Agriculture has become a popular trend among municipalities across the nation. In short, urban agriculture is the growing of plants and the raising of animals within and around cities for personal consumption, education, donation, or sale. This differs from traditional agriculture because it is integrated into the urban economic and ecological systems. Many of these activities can be accomplished with little to no impact on our neighbors while improving personal lives of residents.

When considering possible regulation of chickens, there are a number of somewhat standard elements to be addressed. Each community may have a regulation that works for the residents. Examples include:

Standard Element	High Range/Maximum	Low Range/Minimum
	As Applicable	
Chickens allowed in residential zone	Allowed in all residential zones	Allowed in only one residential zone
License/permit required?	Yes, with fee	No
Number of chickens allowed per dwelling	Unlimited, with approval of Code Compliance	Maximum of 4
Roosters prohibited		
Prohibition on other types of fowl/poultry		
Coop requirements:		
• Setback from property line	30'	5'
• Predator resistant		
• Chicken run	Required	Undefined
• Coop size	Unlimited	100 square feet
• Minimum size	Unlimited	4 square feet/chicken
• Maximum height	15'	7'
Prohibition of on-site slaughtering		

Storage of waste	Addressed	Not addressed
Storage of feed	Addressed	Not addressed
Acknowledgement of potential homeowner association regulations		

Many of the communities have regulations based off the regulations created by the City of Longmont. The attached regulation from the City of Lafayette is based on Longmont regulations and provides an idea of how the elements above are implemented.

Legal/Political Considerations:

This is a local decision that the Trustees are able to determine.

Alternatives/Options:

The Trustees can direct staff whether or not to move forward with amendments to the Land Use Code.

Financial Considerations:

Not Applicable.

Staff Recommendation:

Staff will follow the direction provided by the Board of Trustees.

Municipality/Code Provisions	Arvada	Aurora	Boulder
Chickens Defined As:	Fowl	Livestock	Undefined
Chickens Allowed in Residential Zones?	Yes	No	Yes
Number Allowed (if applicable)	5 females	n/a	n/a

Municipality/Code Provisions	Brighton	Broomfield	Dacono
Chickens Defined As:	Livestock	Fowl	Undefined
Chickens Allowed in Residential Zones?	No	No	No
Number Allowed (if applicable)	n/a	n/a	n/a

Municipality/Code Provisions	Erie	Firestone	Fort Collins
Chickens Defined As:	Livestock	Poultry	Farm Animal
Chickens Allowed in Residential Zones?	No	No	Yes
Number Allowed (if applicable)	n/a	n/a	6

Municipality/Code Provisions	Fort Lupton*	Lafayette	Lakewood
Chickens Defined As:	Undefined	Backyard Chicken	Animal, Small
Chickens Allowed in Residential Zones?	No	Yes	Yes
Number Allowed (if applicable)	n/a	6	4

Municipality/Code Provisions	Longmont	Louisville	Loveland
Chickens Defined As:	Backyard Chicken	Backyard Chicken	Domesticated Fowl
Chickens Allowed in Residential Zones?	Yes	No	Yes
	4	n/a	As determined by Code Compliance Officer
Number Allowed (if applicable)			

Municipality/Code Provisions	Thornton	Westminster	Wheatridge
Chickens Defined As:	Backyard Chicken	Livestock	Poultry
Chickens Allowed in Residential Zones?	Yes	No	Yes
Number Allowed (if applicable)	4	n/a	n/a

*considering a Code change

ARTICLE VI. - RESTRICTIONS AND PROHIBITIONSSec. 25-98. - Guard dog requirements.Sec. 25-99. - Backyard chickens.Secs. 25-100—25-104. - Reserved.**Sec. 25-98. - Guard dog requirements.**

It shall be unlawful to place or maintain guard dogs in any area for the protection of persons or property unless the following conditions are met:

- (a) The dogs owner shall comply with the requirements of section 25-89(a)(1), (2), (4), (8) and (9) pertaining to the keeping of vicious animals;
- (b) The dogs shall be confined to an enclosed and secure area or under the absolute control of an adult handler at all times;
- (c) Such building or enclosure shall have adequate safeguards against accidental entry by children and against accidental and unintentional entry by any person;
- (d) Warning signs meeting the requirements of section 25-89(a)(6) shall be conspicuously posted at all access points to the property indicating the presence of guard dogs and such signs shall plainly show a telephone number where a person responsible for controlling such dogs can be reached at all times;
- (e) Prior to the posting of guard dogs on any property, the person or persons responsible for the posting shall inform community service division in writing of their intention to post such dogs, the number and breed of dogs to be posted, the location where such dog or dogs will be posted, the hours of posting and the approximate length of time such dog or dogs will be patrolling the property;
- (f) In the event that the chief of police or his/her agent determines that the presence of the guard dogs or the circumstances of their presence constitutes a present danger to any person, property or animal, the chief or his/her agent shall issue a cease and desist order to be served upon the person notifying the police department under subsection (e) of this section. Service shall be in person or by certified mail, return receipt requested, to the person responsible for the dogs as set forth in subsection (e) of this section.

(Ord. No. 2006-21, § 1, 5-16-06)

Sec. 25-99. - Backyard chickens.

It shall be unlawful to place or maintain **backyard chickens** in any area unless the following conditions and requirements are met:

- (a) **Backyard chickens** are an accessory use in conjunction with an established residential use. Refer to Table 26A - Permitted Uses in Chapter 26 of the Lafayette Code of Ordinances for a list of the zoning districts where **backyard chickens** are allowed.
- (b) A **backyard chicken** license must be approved by the community development department. A nonrefundable application fee shall be submitted with the **backyard chicken** license application. City council shall set the amount of such fee by resolution.
- (c) No more than six (6) **backyard chickens** are permitted per dwelling unit.
- (d) Roosters are prohibited.
- (e) Other poultry or fowl are prohibited. No person may own or keep any other fowl, including, but not limited to, ducks, quail, geese, pigeons or turkeys.
- (f) **Backyard chickens** are required to be located within a designated chicken coop and chicken run that shall meet the following requirements:
 - (i) The **chicken coop** and **chicken run** shall be located in the rear or **backyard** of a residential property.
 - (ii) Neither the coop nor run, nor any part thereof, shall be located between the rear of the principal structure and the front yard lot line.
 - (iii) The coop shall have a minimum five (5) feet setback from any side or rear property line, except as permitted in subsection 25-99(f)(xii).
 - (iv) Coops shall be predator resistant with a solid covered roof.
 - (v) Water shall be provided onsite and accessible to **chickens** at all times.
 - (vi) During daylight hours, the **chickens** shall have access to a **chicken run** that is adequately fenced and protected from predators and shall also have access to a **chicken coop**.
 - (vii) From dusk until dawn, **chickens** shall be protected from predators by being enclosed within a **chicken coop**.
 - (viii) The maximum **chicken coop** size is one hundred (100) square feet, except as permitted in subsection 25-99(f)(xii).
 - (ix) A minimum of four (4) square feet of space per **chicken** shall be provided in both the coop and the run.
 - (x) The maximum height of a coop shall be no more than seven (7) feet at the highest point of the roof, except as permitted in subsection 25-99(f)(xii).
 - (xi) No **chickens**, coop or run shall be located in common areas of a multi-unit, multi-use, or multifamily property.
 - (xii) Existing structures on a property as of February 28, 2011, that do not meet the setback requirement in Code subsection 25-99(f) (iii), exceed the maximum size requirement in Code subsection 25-99(f)(viii), or exceed the maximum height in Code subsection 25-99(f)(x) may be used as a **chicken coop** as long as the structure is located in the rear yard of the property and if said structure is approved as part of the **backyard chicken** license.

(g)

Chicken coops and **chicken** runs shall be maintained and shall be regularly cleaned to control dust, odor, and waste and not constitute a nuisance, safety hazard or health problem to surrounding properties.

- (h) No on-site slaughtering is allowed.
- (i) **Chicken** feed shall be stored in a resealable, airtight, predator-proof container.
- (j) **Chicken** waste shall only be stored in resealable, airtight, predator-proof container.
- (k) Many homeowner association bylaws do not allow poultry of any kind. The City of Lafayette encourages residents to research their individual homeowner association regulations.

(Ord. No. 2011-05, § 2, 2-15-11)

Secs. 25-100—25-104. - Reserved. 